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AUTHOR Camara, Wayne J.
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ABSTRACT

A backlog of applicants for civil service positions and a work overload on selection and classification specialists at one civil service office prompted a study of the usefulness of a job-person match for personnel selection. An instrument measuring applicants' match to a large number of professional and technical jobs within a state civil service office was developed from data collected through a comprehensive job analysis. A study was conducted which investigated the selection decisions of civil service applicants (N=103) following completion of this instrument measuring their job-person match with each of 70 jobs. Applicants either completed the instrument, completed the instrument and received additional feedback concerning their match to jobs, or served as a control. The results revealed that applicants' selection decisions were modified by feedback on their matches to the different jobs. Applicants completing the instrument but receiving no feedback were not significantly different from controls. Applicants' match to jobs was significantly, but differentially related to civil service test performance across groups. Results indicated that applicants were willing to alter their initial selection decisions and even eliminate jobs based on feedback from an instrument measuring job-person match under certain conditions. (Author/NB)

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UTILITY OF A JOB-PERSON MATCH FOR PERSONNEL SELECTION

Wayne J. Camara

Human Resources Research Organization (HumRRO)
1100 S. Washington St.
Alexandria, VA 22314
Tel. (703) 549-3611

Paper presented at the 95th Annual Convention of the American Psychological Association, New York, NY.

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Utility of a job-person match for personnel selection

Abstract

This study investigated the selection decisions of civil service applicants following completion of an instrument measuring their job-person match with each of 70 jobs. One group of applicants completed the instrument, a second group completed the instrument and received additional feedback concerning their match to jobs, and a third group served as a control. Overall, applicants' selection decisions were modified by feedback on their matches to the different jobs. Applicants completing the instrument but not receiving any feedback were not significantly different than the control group. Applicants' match to jobs was significantly, but differentially related to civil service test performance across groups. Results indicate that applicants are willing to alter their initial selection decisions and even eliminate jobs based on feedback from an instrument measuring job-person match under certain conditions. The utility of this instrument as a job preview is contrasted with work on realistic job previews.

Utility of a job-person match for personnel selection

An instrument measuring applicants match to a large number of professional and technical jobs within a state civil service office was developed from data collected through a comprehensive job analysis. This study examines the development of this instrument and the relationship between feedback from this instrument and applicants' selection decisions and applicants' initial job attraction ratings. In addition, applicants' match to specific civil service jobs is compared to their subsequent performance on civil service examinations.

This study was undertaken due to a rapidly increasing backlog of applicants for civil service positions and an extreme work overload on selection and classification specialists at a civil service office. Personnel staff noted that applicants, often not familiar with job requirements and tasks, apply for jobs for which they are not well matched in terms of qualifications and personal interests. Job-person mismatch requires a substantial additional work for personnel staff and often results in an unsuccessful placement. Applicants also tend to follow Glueck's (1974) satisfier profile, selecting the first job that meets their minimum requirements, unaware of the full range of jobs. Applicants are often willing to accept any position to "get into the civil service system" based on organizational attraction as opposed to job attraction. Providing applicants with realistic information on job tasks and a measure of their suitability in terms of skills and abilities required in various jobs should improve the quality of the placement and applicants' selection decisions.

Previous research on realistic job previews (RJPs) was relevant to this study since feedback from the instrument of job-person match served as a job preview, exposing applicants to a variety of available jobs and the skills and abilities required for these jobs. Previously, RJPs have been concerned with turnover and job satisfaction. Eleven studies of RJPs were found in the literature that dealt with applicant selection decisions. Of these, only two studies reported RJPs significantly affected applicants' selection decisions. Numerous methodological weaknesses exist in these studies.

In using the instrument of job-person match as a job preview, this study attempted to incorporate criteria cited in earlier research that would optimize the preview's effect on self selection: (1) utilize large sample sizes (Reilley, Brown, Blood, & Maltesta, 1981), (2) establish the validity of information contained in the previews, (3) provide manipulation checks, (4) present the preview prior to any selection processes, lessening the effect of dissonance, (5) investigate applicants having higher intelligence and more complicated job preferences, and (6) provide numerous job choices/alternatives (Reilley, et al., 1981). Under the conditions outlined above it seemed much more likely that applicants would be willing to eliminate jobs in which they may not succeed or jobs that did not meet their initial expectations.

The impact of self assessments on selection decisions was also investigated since the instrument of job-person match was designed as a self-report instrument of applicants' abilities and skills. Downs, Farr, & Colbeck (1978) found that applicants' rate of reporting to work was signifi-

cantly related to their inferences of performance on a work sample test even with the absence of any objective feedback. The impact of self expectations (individual's ability to meet organization's needs) as well as job expectations (organization's ability to meet individual's needs) were investigated in this study. In this study, applicants were provided information concerning job expectations through a group orientation session, and information on self expectations through feedback from the instrument. However, applicants may gain insight into self expectations through merely completing the instrument.

Five research hypotheses were formulated for this study. It was hypothesized that applicants completing the instrument and receiving feedback (preview/feedback group) would have significantly higher matches with jobs they selected than other applicants. Second, it was hypothesized that applicants completing the instrument without any feedback (self inference group) would have significantly higher matches to jobs selected than applicants in a control group. This hypothesis assumed that completion of the instrument alone would allow applicants to infer their match to jobs, similar to the Downs, et al., study (1978). This was an attempt to extend Bem's theory of self perception (1972) to self assessments of one's abilities. The third and fourth hypotheses contrasted applicants' initial job attraction ratings with jobs they later selected. Applicants receiving the feedback should have the greatest differences between jobs initially attracted to and jobs selected; applicants completing the instrument without feedback should have greater differences than applicants in the control group. The last hypothesis predicted that applicants' job-person match,

based on the instrument, would be highly related to their performance on the respective civil service examinations.

Method

Sample One hundred and ninety-one applicants for professional and technical job classifications at a state civil service office were randomly drawn during a 16 week period and asked to voluntarily complete the instrument of job-person match. Applicants were randomly assigned to one of three groups. Sixty-nine applicants did not return to apply for a job within 45 days and were subsequently dropped from the sample. An additional, 19 subjects from the control group did not return completed instrumentes in the mail and were also dropped from the final study sample of 103 participants. There were no significant differences between applicants dropped from the sample and the remaining sample in terms of several demographic variables (e.g., age, race, sex, months unemployed).

Development of the Instrument A detailed job analysis had been conducted during the previous year for all 70 professional and technical jobs chosen for this study. Ratings on the presence/absence of skills and abilities, as well as the level of skills and abilities required for each job, had been obtained from incumbents, supervisors, and professional raters. Correlations among ratings from job analyses were computed to investigate the reliability and validity of criteria used for the instrument. Convergent validity was tested by correlating ratings between different rating sources. Results indicated that correlations were significant (mean $r=.432$ to $.579$, $p < .05$). Results of separate generalizability analyses for each job classi-

fication (mean p=.524) indicated that variance due to rating source, and raters within source was insignificant. Differences in ratings were primarily attributed to differences in job requirements. It was concluded that the job analyses data were valid and could serve as criteria to match applicants with jobs on the instrument.

The final skills and abilities identified for each of these jobs were combined into a global skills and abilities pool. Duplicate skills or abilities across jobs were dropped, while similar skills and abilities were combined by a personnel specialist. Items from the original job analysis surveys were reformatted to serve as items on the instrument of job-person match. The instrument was pretested and the final instrument contained measures of 58 separate general skills and abilities found in one or more of the 70 jobs. Four performance levels existed for each measure providing 232 separate skills and abilities across jobs. Items required applicants to rate the degree of training, experience, or knowledge they had in performing each skill or exhibiting each ability. Thus, self assessments of previous experiences were requested from applicants as opposed to self assessments of their skills and abilities.

Procedures Applicants for civil service positions applied on a walk-in basis anytime during the normal operating hours of the office. All applicants were assigned to a group orientation session. Applicants were provided with a 30 minute orientation on the state civil service system and application procedures. Applicants also completed a rating scale indicating the jobs that they were initially most attracted to and most interested in

applying for in the civil service system. Information on existing or future openings or examination dates for jobs was not provided to applicants during the orientation. Applicants were then randomly assigned to one of three groups. The preview/feedback group (n=34) completed the instrument and were mailed feedback concerning their match to each job classification within seven days of the orientation session. Feedback sheets provided applicants with information on the degree they were matched to various jobs, based on the instrument of job-person match. The self inference group (n=34) also completed the instrument but did not receive any feedback on their match to jobs. The instrument was completed by applicants in both experimental groups during the orientation session. The remaining applicants were assigned to the control group (n=35), completing the instrument approximately 45 days later than the experimental groups and following selection decisions by all applicants. The normal procedures of the civil service office were followed for the remainder of the study. Table 1 illustrates the overview of the study procedures.

The state civil service office requires applicants to "sign-up" for jobs they are interested in applying for and then to complete the appropriate civil service examination. Applicants signed-up for a job between one to four weeks following the orientation session. Then they were scheduled for the appropriate civil service examination, unless it was unavailable, in which case they selected another job. Two measures of selection decisions were used in this study: (1) application for jobs (sign-

up), and (2) completion of the civil service exams. Attending a test session and completing an examination constituted a more committed self selection decision than merely signing-up for that exam.

Results

A series of one-way analyses of variance, with a-priori contrasts, and correlational analyses was used to test the hypotheses. The first and second hypotheses predicted that exposure to the feedback and preview would increase the similarity between results from the instrument and jobs selected by applicants. Results in Table 2 indicate that groups significantly differed in the congruence between the job-person match and jobs applied for ($F = 5.70$, $p < .05$) and jobs in which applicants completed testing ($F = 3.77$, $p < .05$). A priori contrasts conducted to test the first and second hypotheses illustrated that both measures of applicant selection decisions were significantly more congruent with the job-person match for the preview/feedback group than other groups. Applicants provided with the preview, but not the feedback (self inference group) were not significantly different from the control group on the measures.

The third and fourth hypotheses predicted that initial job attraction would be inversely related to selection decisions with increased exposure to the preview and feedback. That is, applicants receiving feedback should be the most willing to modify their initial job attraction. Results in Table 3 indicated that groups significantly differed in congruence between initial job attraction ratings and both measures of selection decisions. As predicted, the preview/feedback group had the greatest difference with no

significant differences between the self inference group and the control group. Correlations between an instrument measuring the job-person match and performance on civil service exams were moderate, but significant for all applicants (mean $r=.28$, $p<.05$). Table 4 illustrates that applicants' performance on the instrument and civil service exams was significant for both experimental groups, but not the control group.

Overall, the results indicate that the combination of the preview/ feedback was effective in moderating applicant selection decisions. The results support a "self selection explanation" for the effects of the job-person match instrument (Reilly et al., 1981). Applicants receiving information concerning job expectations and self expectations were willing to modify their selection decisions and even eliminate jobs that were formerly of interest. Previous research provided little support for this effect from RJPs. However, substantial differences existed between the instrument and earlier studies, including: RJP format, order of presentation, the types of information provided in the preview, the availability of 70 jobs to choose from, and the attempts to reduce the number of uncontrolled variables. Selection decisions were made by applicants prior to any obtrusive selection processes (i.e., interviews) and hiring decisions, unlike the majority of earlier studies.

Results also indicated that completing the instrument and not receiving feedback was of no value in improving the selection process. Possibly, applicants were unable to separate out which items, regarding specific skills, related to jobs of interest and did not attempt any inferences.

Discussion

This study presented information concerning job requirements gathered from a detailed and validated job analysis to applicants in the context of an instrument of job-person match. Its importance lies in the findings that a combination of valid information concerning self and job expectations can modify self selection decisions and initial job attraction. Feedback concerning applicant match to jobs offers utility for organizations faced with a large pool of applicants, however additional research is needed to further investigate these processes in different circumstances and organizations. This methodology offers a much simpler alternative for coordinating jobs and people than Cascio and Awad's assessment classification model (1981) and other methods aimed at finding the right "fit" prior to employment.

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Table 1

OVERVIEW OF THE STUDY DESIGN

Milestone	Preview/Feedback Group	Self Inference Group	Control Group
Pre-Attraction Measure	X	X	X
Skill Preview	X	X	
Feedback on Job-Person Match	X		
Apply for Jobs	X	X	X
Administered Civil Service Exams	X	X	X
Mailed Skill Preview			X

Table 2

ONE-WAY ANALYSIS OF VARIANCE FOR GROUP DIFFERENCES IN TWO CONDITIONS OF SELF SELECTION DECISIONS ON THE JOB-PERSON INDEX

	Jobs Applied For			Jobs Completed Exams		
Source	S.S.	df	F	S.S.	df	F
Between Groups	503.60	2	5.70*	3755.30	2	3.77**
Within Groups	50967.43	115		43290.59	87	
TOTAL	55823.46	117		47045.89	89	

*significant at $p < .006$ **significant at $p < .06$

A PRIORI CONTRASTS

Pooled Variance Contrast	Jobs Applied For T Value	Sig.	Jobs Completed Exams T. Value	Sig.
Pre/Fd>Control	2.45	.016	2.68	.008
Self Inf>Control	.06	.950	−.60	.548
Pre/Fd>Self Inf	2.23	.028	3.18	.002

Table 3

ONE-WAY ANALYSIS OF VARIANCE FOR GROUP DIFFERENCES IN JOB ATTRACTION FOR TWO CONDITIONS OF SELF SELECTION DECISIONS

	Jobs Applied For			Jobs Completed Exams		
Source	S.S.	df	F	S.S.	df	F
Between Groups	45.79	2	11.31*	55.37	2	14.08*
Within Groups	232.76	115		171.03	87	
TOTAL	278.55	117		226.40	89	

*significant at $p < .001$

A PRIORI CONTRASTS

Pooled Variance Contrast	Jobs Applied For T Value	Sig.	Jobs Completed Exams T. Value	Sig.
Pre/Fd>Control	4.57	.001	5.20	.001
Self Inf>Control	.91	.366	1.51	.133
Pre/Fd>Self Inf	3.59	.001	3.34	.001

Table 4

CORRELATION OF CIVIL SERVICE STANDARD SCORES AND JOB-PERSON INDEX

Group	N	r
Preview/Feedback	23	.501*
Self Inference	14	.623*
Control	32	.095
TOTAL	69	.274**

*significant at $p < .01$
**significant at $p < .05$
n is the number of cases available